IN THE CLAIMS

Please amend the claims to read as follows:

1. (currently amended) A device (1) arranged for carrying-out a bioelectrical interaction with an individual, said device comprising:

- sensing means ~~(6)~~ comprising a plurality of electrodes ~~(8,9)~~ arranged to measure a first electrical signal ~~(S)~~ when brought into contact with an individual's skin;

- testing means (18) arranged to deliver a second electrical signal ~~(T)~~ to a corresponding input of said electrodes ~~(8,9)~~, said electrodes being further arranged to generate a response signal ~~(S')~~ upon receipt of the second electrical signal;

- control unit ~~(5)~~ arranged to analyze the first electrical signal and to actuate the testing means ~~(18)~~ upon an occurrence of a predetermined event ~~(15)~~ in the first electrical signal;

- lead-off detection means ~~(14a)~~ arranged to verify an integrity of the contact of said electrodes by analyzing the response signal ~~(S')~~ and detecting a parameter related to said integrity.

2. (currently amended) A device according to Claim 1, wherein the test means ~~(24)~~ comprises a signal generator ~~(24a)~~ arranged to generate the second electrical signal in substantially the same bandwidth as the first electrical signal.

3. (currently amended) A device according to Claim 2, wherein the test means ~~(24)~~ further comprises a sequencer ~~(24b)~~ arranged to deliver a sequence of variable second electrical signals to each input of said electrodes ~~(29,29a)~~ in order to determine the integrity of the contact of each electrode within said plurality of electrodes.

4. (currently amended) A device according to ~~any one of the preceding~~ Claims 1, wherein the device further comprises lead-off indication means ~~(16)~~, said lead-off indication means being actuable by the lead-off detection means ~~(14a)~~ upon a detection of said parameter.

5. (currently amended) A device according to ~~any one of the preceding~~ Claims 1, wherein said bioelectrical interaction comprises monitoring of a physiological condition of the individual.

6. (currently amended) A device according to ~~any one of the preceding~~ Claims 1, wherein said bioelectrical interaction comprises electro-stimulation of a body part of the individual.

7. (original) A method for on-demand verification of the integrity of an electrical contact of an electrode to a body part of an individual, wherein said electrode is part of a device arranged to carry-out a bio-electrical interaction with the individual, said method comprising the following steps:

- measuring a first electrical signal by means of the electrode;
- analyzing the first electrical signal for occurrence of a predetermined event;
- generating a second electrical signal upon detection of the predetermined event;
- generating a response signal by applying the second electrical signal to an input of the electrode;
- analyzing the response signal for detecting a parameter related to said integrity.

8. (original) A method according to Claim 7, wherein the second electrical signal is generated in substantially the same bandwidth as the first electrical signal.

9. (original) A method according to Claim 8, further comprising the steps of:
applying a sequence of variable second electrical signals to each input of said electrodes;
processing the resulting sequence of response signals in order to determine the integrity of the contact of each electrode within said plurality of electrodes.